

In the Claims:

1-6. (Canceled)

7. (Currently Amended) A method for enabling graphic-based linking to the internet, comprising:

~~receiving digital data corresponding to an initial graphic image, the data representing pixels, each having a value;~~

receiving plural bit address information;

processing ~~the initial graphic image in accordance with the plural bit address information, thereby subtly changing the values of said represented pixels to yield an encoded graphic image having the address information steganographically encoded therein~~ an input set of pixel values in accordance with the plural bit address information to yield an output set of pixel values having said address information steganographically encoded therein, each of said sets comprising pixels of at least three different values, said output set of pixel values representing an encoded graphic; and

distributing a version of the encoded graphic ~~image data~~ to users, who can decode the address information therefrom and use same in establishing a link to the internet.

8. (Currently Amended) The method of claim 7 in which the encoded graphic ~~image~~ conveys said plural-bit address information notwithstanding transformation into or out of digital form.

9. (Currently Amended) The method of claim 7 in which the address information is not recognizable as such to human viewers of a rendered version of the encoded graphic ~~image~~.

10. (Original) The method of claim 7 in which the address information comprises a URL.

11. (Original) The method of claim 7 in which the address information comprises an index to a remote data structure, the remote data structure having a corresponding URL address stored therein.

12. (Canceled)

13. (Currently Amended) The method of claim 7 in which the ~~initial~~ encoded graphic ~~image~~ comprises a photographic image.

14. (Currently Amended) A computer readable storage medium having stored thereon an encoded graphic ~~image~~ encoded according to claim 7.

15. (Currently Amended) The method of claim 7 in which the ~~initial~~ encoded graphic ~~image-is~~ comprises a color image, rather than a grayscale image.

16. (Previously Presented) A method for enabling graphic-based linking to the internet, comprising:

receiving digital data corresponding to a graphic image;
steganographically encoding the graphic image to hide plural bit address information therein; and
distributing the encoded graphic image data to users, who can decode the address information therefrom and use same in establishing a link to the internet;
wherein the steganographic encoding is adapted in strength in accordance with local characteristics of the graphic image, said adaptation comprising more than two different strengths.

17. (Previously Presented) A method for enabling graphic-based linking to the internet, comprising:

receiving digital data corresponding to a graphic image;
steganographically encoding the graphic image to hide plural bit address information therein; and
distributing the encoded graphic image data to users, who can decode the address information therefrom and use same in establishing a link to the internet;

wherein said distributing comprises distributing the encoded graphic image data in digital, rather than hardcopy, form.

18. (Previously Presented) A method for enabling graphic-based linking to the internet, comprising:

receiving digital data corresponding to a graphic image;

steganographically encoding the graphic image to hide plural bit address information therein; and

distributing the encoded graphic image data to users, who can decode the address information therefrom and use same in establishing a link to the internet;

wherein the plural-bit address information is encoded redundantly through the graphic image, wherein all of said plural bits can be recovered both from first and second non-overlapping excerpts of said image.

19. (Previously Presented) A method of initiating access to a computer via a data communications medium, the method comprising:

receiving artwork corresponding to an object to be printed, the artwork including text and background;

steganographically embedding into at least the background of said artwork certain information indicative of an address associated with said computer; and

printing said object using the artwork into which said information has been steganographically embedded.

20. (Previously Presented) A physical object printed on a substrate and including text and background, at least the background being of continuous tone and having a plural-bit code steganographically embedded therein, said code being an index to a data structure that specifies address information of a computer resource that is to be associated with said object.

21. (Previously Presented) The object of claim 20 wherein said data structure is maintained on a computer separate from the computer whose address information is to be associated with the object.

22. (Previously Presented) A method for graphic-based linking to a computer address, comprising:

receiving digital data at a user's computer, the data corresponding to a graphic image;

using plural-bit index data steganographically decoded from said graphic image digital data to index a database;

obtaining from said database a URL address corresponding to said plural-bit index data;

establishing a link to said URL address; and

presenting a screen display on the user's computer in accordance with information obtained from said URL address.

23. (Previously Presented) A method of initiating access to a computer via a data communications medium, the method comprising:

providing first data indicative of an address associated with the computer;

steganographically embedding the first data in a second object comprising visual data, said embedding occurring in-band within said visual data, rather than in a part of said second object not intended for presentation to a user;

decoding from the second object the steganographically embedded first data; and
initiating a link to the computer using the first data.

24. (Previously Presented) The method of claim 23 wherein the first data comprises a URL address.

25. (Previously Presented) The method of claim 23 wherein the first data comprises an index number for use in accessing a data base.

26. (Previously Presented) The method of claim 23 that includes performing said decoding and initiating in the same device.

27. (Previously Presented) The method of claim 23 in which the second object is in digital form, and is not rendered into human-perceptible form between said embedding and decoding.

28. (Previously Presented) The method of claim 23 that includes distributing the second object to at least certain members of the public between said embedding and decoding.

29. (Currently Amended) A method of initiating access to a computer via a data communications medium, the method comprising:

providing first data indicative of an address associated with the computer;
steganographically embedding the first data in ~~a second~~ an object comprising visual data, said embedding extending generally throughout a sampled representation of said ~~second~~ object, rather than localized in a particular portion thereof, wherein the complete first data can be recovered from an excerpt of said ~~second~~ object and used to initiate a link to the computer.

30. (Currently Amended) The method of claim 29 in which the ~~second~~ object is represented by plural samples, and said embedding changes a majority of said samples.

31. (Currently Amended) The method of claim 29 in which the ~~second~~ object is represented by plural samples, and the embedding is relatively weaker in regions where it might more readily be perceived.

32. (Withdrawn but restriction traversed) A method comprising:
at a first device, receiving data representing a graphic, the graphic having non-uniformly toned regions with information steganographically encoded therein;
decoding the steganographically encoded information from the received data;
communicating with a second, remote device;
receiving data from the remote device; and
controlling an aspect of operation of the first device in accordance with said data received from the remote device;
wherein the data received from the remote device is a function of information decoded from the received data.

33. (Withdrawn but restriction traversed) The method of claim 32 wherein said steganographic encoding is adapted in strength in accordance with features of the graphic data, said adaptation comprising more than two different strengths.

34. (Withdrawn but restriction traversed) The method of claim 32 wherein said steganographic encoding is manifested as extra pseudo-random noise in the received graphic data.

35. (Withdrawn but restriction traversed) The method of claim 32 wherein said controlling includes presenting a web page on the first device, the contents of said web page depending on data received from the remote device.

36. (Withdrawn but restriction traversed) The method of claim 32 that includes using said decoded information to identify a node on a computer network, said node comprising the remote device.

37. (Withdrawn but restriction traversed) The method of claim 32 wherein the remote device comprises a server computer.

38. (Withdrawn but restriction traversed) The method of claim 32 that includes controlling output presented to a user of the first device in accordance with the data received from the remote device.

39. (Withdrawn but restriction traversed) The method of claim 32 wherein the remote device is identified in accordance with the information decoded from the received data.

40. (Withdrawn but restriction traversed) The method of claim 32 that includes producing the received graphic data from a non-digital representation thereof.

41. (Withdrawn but restriction traversed) The method of claim 40 that includes producing the received graphic data by scanning a tangible medium with visible light

42 – 50. (Canceled)

51. (Withdrawn but restriction traversed) A method comprising:

receiving audio data; and

steganographically encoding machine readable data in the audio data, the machine readable data identifying a computer implemented process that is to be invoked when the steganographic encoding is decoded and acted upon by a computer device.

52-54. (Canceled)

55. (Withdrawn but restriction traversed) A method comprising:

receiving graphic data; and

steganographically encoding machine readable data in the graphic data, the machine readable data identifying a computer implemented process that is to be invoked when the steganographic encoding is decoded and acted upon by a computer device.

56. (Withdrawn but restriction traversed) The method of claim 55 wherein said steganographic encoding is adapted in strength in accordance with local characteristics of the graphic data, said adaptation comprising more than two different strengths.

57. (Withdrawn but restriction traversed) The method of claim 55 wherein said steganographic encoding is manifested as extra pseudo-random noise in the received graphic data.

58. (Withdrawn but restriction traversed) The method of claim 55 wherein said computer implemented process includes communicating with a remote computer, and controlling information presented to a user in accordance with data received from said remote computer.

59. (Withdrawn but restriction traversed) A tangible medium comprising an encoded graphic, the graphic comprising non-uniformly toned regions that are steganographically encoded to convey machine readable data, wherein said machine-

readable data serves to elicit a processing action corresponding thereto when decoded by a first computer device

60. (Withdrawn but restriction traversed) The tangible medium of claim 59 wherein said encoding is adapted in strength in accordance with local characteristics of the graphic, said adaptation comprising more than two different strengths.

61. (Withdrawn but restriction traversed) The tangible medium of claim 59 wherein said steganographic encoding is manifested as extra pseudo-random noise in the encoded graphic.

62. (Withdrawn but restriction traversed) The tangible medium of claim 59 in which said data serves to trigger linking of said first computer device to a second computer device, the second computer device being determined in accordance with said data.

63. (Withdrawn but restriction traversed) The tangible medium of claim 59 in which the processing action includes communicating with a second computer device, receiving data from said second device, and controlling an aspect of operation of the first device in accordance with said received data.

64. (Withdrawn but restriction traversed) A method comprising:
receiving an index number;
by reference to said index number, obtaining from a database an identification of a node on a computer network corresponding thereto;
establishing a link to said identified node;
receiving information from said node; and
controlling operation of a user device in accordance with information received from said node;

wherein the index number is based on information decoded from a steganographically encoded creative data object.

65. (Withdrawn but restriction traversed) The method of claim 64 wherein said creative data object represents a graphic having regions of non-uniform tone, and said index number is steganographically encoded in said regions.

66. (Withdrawn but restriction traversed) The method of claim 64 wherein said creative data object represents audio.

67. (Withdrawn but restriction traversed) The method of claim 64 in which said controlling includes directing a web browser on the user device to present information received from said identified node.

68. (Withdrawn but restriction traversed) The method of claim 64 wherein a web browser performs said decoding of the steganographically encoded creative data object.

69. (Withdrawn but restriction traversed) A network-connected device characterized by a decoder that decodes information steganographically encoded within a creative data object, the device utilizing said decoded information to elicit an action by a remote computer, said remote computer transferring information to said device through the network in accordance with information decoded from the creative data object.

70. (Canceled)

71. (Withdrawn but restriction traversed) The device of claim 69 wherein the creative data object represents a graphic having non-uniformly toned regions with said information steganographically encoded therein.

72. (Withdrawn but restriction traversed) The device of claim 69 in which said decoded information comprises address information, and the device includes a web browser that loads a web page identified by said address information

73. (Withdrawn but restriction traversed) The device of claim 69 wherein said steganographic encoding of said data object is adapted in strength in accordance with features of the object, said adaptation comprising more than two different strengths.

74. (Withdrawn but restriction traversed) The device of claim 69 wherein said steganographic encoding is manifested as extra pseudo-random noise in the data object.

75. (New) The method of claim 7 wherein said processing comprises combining overlay data with said input set of pixel values.

76. (New) The method of claim 7 wherein said processing changes pixel values, and the magnitudes of said changes approximate magnitudes of naturally-occurring digital image noise.

77. (New) The method of claim 7 wherein the encoded graphic comprises continuous tones.

78. (New) The method of claim 7 wherein said processing comprises changing values of at least certain of the pixels in the input set of pixel values.

79. (New) The method of claim 7 wherein said processing comprises changing values of at least certain of the pixels of the input set of pixels values based, in part, on initial values thereof.

80. (New) A method for enabling graphic-based linking to the internet, comprising:

receiving plural bit address information;

processing input graphic information in accordance with the plural bit address information to yield encoded graphic information having the address information steganographically encoded therein; and

distributing a version of the encoded graphic information to users, said version representing the encoded graphic in continuous tone form.

81. (New) The method of claim 16 that further includes:

decoding the plural-bit address information from data corresponding to the encoded graphic image;

directing a web browser to an internet address determined by reference to said decoded information; and

from said internet address, presenting a user an opportunity to engage in a purchase transaction over the internet.

82. (New) The method of claim 17 that further includes:

decoding the plural-bit address information from data corresponding to the encoded graphic image;

directing a web browser to an internet address determined by reference to said decoded information; and

from said internet address, presenting a user an opportunity to engage in a purchase transaction over the internet.

83. (New) The method of claim 18 that further includes:

decoding the plural-bit address information from data corresponding to the encoded graphic image;

directing a web browser to an internet address determined by reference to said decoded information; and

from said internet address, presenting a user an opportunity to engage in a purchase transaction over the internet.

84. (New) The method of claim 22 wherein said screen display presents a user an opportunity to engage in a purchase transaction over the internet.

85. (New) The method of claim 23 that further includes presenting, from said computer, an opportunity for a user to engage in a purchase transaction over the internet.

86. (New) The method of claim 29 that further includes:

decoding the first data from said object;

directing a web browser to an internet address determined by reference to said decoded first data; and

from said internet address, presenting a user an opportunity to engage in a purchase transaction over the internet.

87. (New) A method comprising:

receiving data corresponding to an encoded graphic, said graphic including text and background, at least the background being of continuous tone and having a plural-bit code steganographically embedded therein, said code being an index to a data structure that specifies address information of a computer resource that is to be associated with said graphic;

decoding said code from said received data;

by reference to said data structure, determining address information associated with said graphic;

directing a web browser in accordance with said address information; and

through use of said web browser, presenting a user an opportunity to engage in a purchase transaction.